

**IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE CONSENT ORDER**

IN THE MATTER OF:

CHAMNESS TECHNOLOGY, INC.

Wapello County, Iowa

ADMINISTRATIVE CONSENT ORDER

No. 2010-WW - ~~10~~

No. 2010-SW- ~~27~~

TO: Chamness Technology, Inc.
Rebecca Nott
Environmental Compliance Manager
24820 160th Street
Eddyville, Iowa 52553

Chamness Technology, Inc.
Gary Chamness, Registered Agent
2255 Little Wall Lake Road
Blairsburg, Iowa 50034

I. SUMMARY

This administrative consent order (order) is entered into between the Iowa Department of Natural Resources (DNR) and Chamness Technology, Inc. (Chamness) for the purpose of resolving alleged wastewater violations at the Chamness facility located south of Eddyville, Iowa. In the interest of avoiding litigation, the parties have agreed to the provisions below.

Questions regarding this order should be directed to:

Relating to technical requirements: **Relating to legal requirements:**

Paul Brandt, Field Office 6
Iowa Department of Natural Resources
1023 W. Madison
Washington, Iowa 52353
Phone: 319/653-2135

Kelli Book, Attorney for the DNR
Iowa Department of Natural Resources
7900 Hickman Road, Suite 1
Windsor Heights, Iowa 50324
Phone: 515/281-8563

Payment of penalty to:

Director of the Iowa DNR
Wallace State Office Building
502 East Ninth Street
Des Moines, Iowa 50319-0034

II. JURISDICTION

This order is issued pursuant to the provisions of Iowa Code sections 455B.175(1) and 455B.307(2), which authorize the Director to issue any order

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necessary to secure compliance with or prevent a violation of Iowa Code chapter 455B, Division III, Part 1 or Iowa Code chapter 455B, Division IV, Part 1 and the rules adopted or permits issued pursuant thereto and Iowa Code section 455B.109 and 567 Iowa Administrative Code (IAC) chapter 10, which authorize the Director to assess administrative penalties.

III. STATEMENT OF FACTS

Chamness neither admits nor denies the Statement of Facts and enters into this administrative consent order for settlement purposes only.

1. Chamness is an active, permitted, composting facility located several miles south of Eddyville (N 1/2, NW 1/4, Section 19, T73N, R15W, Wapello County). In addition to wood waste and yard waste, Chamness uses numerous industrial waste streams in its composting process. The facility has two retention basins (east and west ponds) to collect and contain all runoff from the 16 acre, asphalt paved composting pad. In November 2009, a third retention basin was added to the facility.

2. On October 16, 2006, Chamness was issued an NPDES Operation Permit for a Land Application System (Permit #90-00-1-05). The operation permit provided provisions for the land application of storm water runoff from the Chamness facility. The operating permit specifically stated that any discharge of wastewater to surface waters was not permitted and no sanitary waste could be discharged to the runoff storage ponds. On December 6, 2007, Chamness was issued a Solid Waste Composting Permit (Permit #90-SDP-10-97P-COM). The composting permit included the provisions on the operation and maintenance of the facility, an operating plan, and a list of approved facilities and products to be accepted at the facility. The composting permit has been amended on several occasions since the original issuance.

3. On November 19, 2008, the DNR entered into an Administrative Consent Order with Chamness to address alleged solid waste and wastewater violations at the Chamness facility (Administrative Consent Order No. 2008-WW-31/2008-SW-40). A plan of action was attached to address the storm water management issues. These actions were required to be incorporated into a revised operating plan submitted to the DNR by December 15, 2008, and then carried out at the specified frequencies. On December 15, 2008, Chamness submitted the required revised operating plan. The operating plan for the compost permit was approved of by the DNR Solid Waste section on April 8, 2009.

4. On January 9, 2009, Brent Earley, DNR Field Office 6 environmental specialist, conducted a facility inspection at the Chamness facility. Chamness had taken a majority of the actions as required by the Administrative Consent Order's operating plan and was intending on beginning the construction of a new storm water and leachate lagoon in the spring.

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5. On February 6, 2009, DNR Field Office 6 received a complaint alleging odor from the Chamness facility for two days. On February 25, 2009, Paul Brandt, DNR Field Office 6 environmental specialist senior, investigated the complaint. He noted that the two storm water ponds had freeboard greater than two feet, and he did not observe any odor.

6. On March 24, 2009, DNR Field Office 6 received a complaint alleging that Chamness was stock piling material from Cargill to the east of the site. The complainant stated that the pile was not on the permitted property and was covered by compost. On March 25, 2009, Kurt Levetzow, DNR Field Office 6 environmental specialist senior, investigated the complaint. Mr. Levetzow observed a white pile of material stockpiled on barren soil next to a pile of compost. Mr. Levetzow met with company officials. The Chamness employees stated that the material was a mix of 80% mycelium and 20% compost. The facility personnel referred to the mixture as Soil Microbial Stimulant (SMS). The facility personnel stated that Cargill was backed up, but offered no explanation as to why the material was not placed on the composting pad. Mr. Levetzow asked if the facility was permitted to accept the mycelium. The facility's permit did not authorize the accepting, mixing, storing, or composting of mycelium. On April 9, 2009, DNR Field Office 6 sent Chamness a letter regarding Mr. Levetzow's visit. A follow-up visit was conducted by Bert Noll, DNR Field Office 6 environmental specialist, Mr. Levetzow, and Mr. Brandt. The field office 6 personnel met with Chamness personnel to discuss Mr. Levetzow's complaint investigation. The facility personnel indicated that stockpiling in a nearby pile rather than on the composting pad was an error and would not happen again. The facility personnel indicated that all compost/feedstock would be stored and mixed on the weather pad in the future. During the visit, the field office 6 personnel noted the stock pile and composting areas appeared to be working as indicated in the facility's operating plan. On May 19, 2009, DNR Field Office 6 sent Chamness a letter summarizing the visit. The letter requested that Chamness submit further information regarding the use of mycelium. Chamness removed the mycelium from the facility.

7. On May 11, 2009, DNR Field Office 6 received a complaint alleging odor from the facility. On June 10, 2009, Mr. Levetzow investigated the complaint. A south wind enabled Mr. Levetzow to smell the facility from a gravel road on the north side of the facility. He was able to detect a composting odor from the road, however after the site visit he determined the facility was operating under normal operations.

8. On May 26, 2009, DNR Field Office 6 received a call at 4:59 PM from Chamness personnel stating that due to recent precipitation the east pond was starting to overflow. On May 27, 2009, the facility personnel called back to the field office. The facility personnel informed Mr. Brandt that the fields were too wet for land application and that the facility would try pumping from the east pond to the west pond. The west pond was full too. Mr. Brandt suggested pumping to the tank

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trucks to give the facility usable capacity. The facility personnel stated the truck capacity would be about 18,000 gallons and the facility would try that approach. On June 18, 2009, DNR Field Office 6 received a call from Chamness personnel stating that because of recent precipitation the lagoons were full and could not contain any more liquids. The facility planned to start hauling later in the week if the weather allowed. On June 24, 2009, DNR Field Office 6 received a call from Chamness personnel indicating that the east pond was overflowing due to the precipitation over night. The overflow ended mid-morning on June 25, 2009. In an email dated June 26, 2009 from Chamness personnel, the facility intended to start hauling immediately and the soil borings had taken place for the new lagoon.

9. On July 8, 2009, DNR Field Office 6 received an email from Chamness personnel stating that the west lagoon at the facility had starting to overflow on July 7, 2009 due to precipitation. The west lagoon overflowed until the morning of July 8, 2009. The email stated as soon as the ground dried up, water would be hauled from the lagoon. On July 10, 2009, DNR Field Office 6 received an email from Chamness personnel stating that the west lagoon had overflowed for a seven hour period during the morning because of precipitation. The email stated some water had been hauled out and more would be as weather permitted.

10. On July 15, 2009, DNR Field Office 6 received a message from Chamness personnel stating that the west lagoon at the facility had overflowed from approximately 11:30 the night before until 7:00 on the morning of July 15. On July 15, 2009, DNR Field Office 6 also received a complaint alleging odor from the Chamness facility. On August 19, 2009, Mr. Levetzow investigated the complaint. Mr. Levetzow met with facility personnel and noted that the windrows were small and had recently been turned. There was no unordinary ponding on the pad and the lagoons were not overflowing. Mr. Levetzow did not note an abnormal odor at the facility; however the odor from the facility was a little greater on the gravel road on the north side of the property. On September 15, 2009, DNR Field Office 6 sent a letter to the facility regarding Mr. Levetzow's inspection. The facility was informed that DNR Field Office 6 would be making periodic visits to the facility.

11. On August 27, 2009, DNR Field Office 6 received an email from Chamness personnel stating that both the east and west lagoons were overflowing because of precipitation. On September 2, 2009, Mr. Brandt conducted an inspection at the facility. Mr. Brandt noted that the east pond had about six inches of freeboard and the west pond had about 12 inches of freeboard. Mr. Brandt noted that soil had been added to the berm near the northeast corner of the west pond to raise a low area. On the day of the inspection, the wind was from the southeast and as Mr. Brandt approached the facility from the gravel road he detected a strong, unpleasant odor. He noted the strongest odor during the facility inspection was observed while standing down-wind of a windrow turner. Mr. Brandt reviewed the facility storm water land application records. The facility personnel stated that a crew would be on site the following week to draw the two ponds down and land apply the contents. In reviewing the facility's Monthly Operation Reports (MOR) for the

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previous two years, Mr. Brandt compared them to the facility's operating plan. The operating plan stated that based on average rainfall, approximately 6.8 Million Gallons (MG) of storm water must be land applied annually. The MORs showed that 2.62 MG was applied in 2008. Since there had been higher than average rainfall in 2008, Mr. Brandt determined there was about 4 MG of storm water unaccounted for. Through July 2009, 2.2 MG had been land applied. A review of the laboratory data indicated that in 2008, the east pond Biological Oxygen Demand (BOD) ranged from 8,000 to 15,000 mg/L and the ammonia-nitrogen ranged from 170 to 950 mg/L. The west pond BOD ranged from 1,300 to 3,300 mg/L and the ammonia-nitrogen ranged from 160 to 400 mg/L. During the inspection, Mr. Brandt observed that there was long grass growing on the tops of the pond berms. The facility's operating permit required that all facilities and control systems be maintained in good working order. Mr. Brandt also reviewed compliance with the administrative consent order issued in November 2008. The facility had complied with all of the terms of the Administrative Consent Order's operating plan except for three areas of concern. First, Mr. Brandt noted that construction on the third storm water pond had not started. The construction permit for the third pond had been issued on November 14, 2008. The Administrative Consent Order required that construction of the third pond be completed within one year of the issuance of the permit. Facility personnel stated the facility was working with the constructor on the construction of the third pond. Second, the plan required the facility to install a marker or gauge to provide a tool for monitoring and recording pond levels, this had not been completed. And, third the plan required the facility to procure a treatment agreement with a wastewater treatment plant for emergency hauling of wastewater. The facility did have an agreement with the Ottumwa wastewater treatment plant, but the Ottumwa plant was only willing to accept a small amount of wastewater due to the high BOD concentration. An additional requirement in the Administrative Consent Order's operating plan stated the facility would turn the windrows at least twice a week. A review of the quarterly reports indicated that the twice weekly turning had not been attained in the first half of the year.

12. On October 9, 2009, DNR Field Office 6 issued a Notice of Violation letter to Chamness for several violations including: violations of conditions of the Administrative Consent Order; pond freeboard exceedances; and reporting of discharges. The Notice of Violation letter noted that facility personnel had reported seven pond overflow events between May and August 2009. All of the events were caused by precipitation. The ponds at the facility were designed to contain a 25 year/24 hour rainfall event. The data indicates that the 25 year/24 hour rainfall event for the Ottumwa area is approximately 5.5". Records indicate that the greatest amount of rain received during the seven discharges at the facility was 3.7". The facility's Operation Plan of the Composting Permit states that the water level in the basins should never get within two feet of the top of the basin wall. In regards to the reporting requirements, the facility's NPDES permit requires that discharges are to be reported to the DNR within six hours. (The permit has since been amended to allow for a 24 hour reporting time.) The reporting times by Chamness personnel on the seven discharges ranged from immediately to 18 hours. The Notice of Violation

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letter required Chamness to develop a reporting protocol. The Notice of Violation letter required the following: 1) finish the third storm water pond by November 14, 2009; 2) assure that all storm water controls are in place before starting land disturbing activities; 3) install pond depth markers or gauges on the ponds; 4) negotiate a treatment agreement with a wastewater treatment plant for emergency hauling of larger quantities of wastewater; 5) assure all windrows are turned at least twice weekly; 6) keep all pond berms mowed; 7) manage storm water to prevent pond overflows; 8) manage the facility with best management practices to minimize conditions such as odors which may create nuisance condition or a public health hazard; 9) develop a standard plan for reporting overflows and other types of spills; and 10) provide an accounting for the missing four MG of storm runoff in 2008.

13. On November 3, 2009 and November 12, 2009, DNR Field Office 6 received complaints regarding the odor at the Chamness facility.

14. On November 27, 2009, Chamness completed construction on the third pond at the facility.

IV. CONCLUSIONS OF LAW

Chamness neither admits nor denies the Conclusions of Law and enters into this administrative consent order for settlement purposes only.

1. The Storm Water Pollution Prevention Plan of Composting Permit #90-SDP-10-97P-COM, specifically Special Provision 6, Section L of the Operation Plan states that the water level in the basins should never get within two feet of the top of the basin wall. Between the months of May and August 2009, there were at least seven overflow events at the facility indicating that the facility was not in compliance with the composting permit. Additionally, during Mr. Brandt's inspection in September 2009, both basins had less than two feet of freeboard. The above-mentioned facts indicate violations of this provision.

2. 567 IAC 64.3(1) states that no person shall operate any wastewater disposal system contrary to any condition of an operation permit issued by the Director. Standard Condition 14 of Operating Permit #90-00-1-05 (permit in place at the time of the violations) required that all discharges were to be reported within six hours. The reporting of the seven overflows by Chamness personnel to DNR Field Office 6 ranged from immediately to 18 hours. The reports made after the six hour requirement were violations of the operating permit. The above-mentioned facts indicate violations of this provision.

3. 567 IAC 105.3(7) states that solid waste materials shall be managed through the entire process in accordance with best management practices to minimize conditions such as odor, dust, noise, litter and vectors which may create nuisance conditions or a public health hazard. DNR Field Office 6 received at least

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five odor complaints between February 2009 and November 2009. The above-mentioned facts indicate violations of this provision may have occurred.

4. The plan of action included with Administrative Consent Order No. 2008-WW-31/2008-SW-40 required that Chamness install pond water level markers by December 15, 2008. During Mr. Brandt's September 2009 investigation, he noted that the water level markers had not been installed. The above-mentioned facts indicate a violation of the Administrative Consent Order.

5. The plan of action included with Administrative Consent Order No. 2008-WW-31/2008-SW-40 required that Chamness procure a treatment agreement with a wastewater treatment plant for emergency hauling of wastewater. Chamness has an agreement with the Ottumwa wastewater treatment plant, but that plant is only willing to accept a small amount of wastewater because of the high BOD concentration. This is not a viable option in a high water emergency. The facility had at least seven overflow events in a three month period of 2009 but did not haul any of the water to a wastewater treatment plant. The above-mentioned facts indicate a violation of the Administrative Consent Order.

6. The plan of action included with Administrative Consent Order No. 2008-WW-31/2008-SW-40 required that the windrow turning frequency would be at least twice per week. The review of the records for the first half of 2009 indicated that the twice per week frequency had not been achieved. The above-mentioned facts indicate a violation of the Administrative Consent Order.

V. ORDER

THEREFORE, the DNR orders and Chamness agrees to do the following:

1. Chamness shall comply with all provisions of 567 IAC 105, NPDES Permit #90-00-1-05, and Permit #90-SDP-10-97P-COM, and the Plan of Action included in Administrative Consent Order No. 2008-WW-31/2008-SW-40;
2. Chamness shall maintain at least two feet of freeboard at all times in all three of the storm water ponds at the facility;
3. Chamness shall ensure that there are no overflows from any of the three storm water ponds at the facility;
4. Chamness shall employ best management practices to minimize odor;
5. Within 30 days from the date the Director signs this order, Chamness shall develop a contingency plan and treatment agreement with a wastewater treatment facility that can accept large volumes of wastewater in the event the ponds are nearing full capacity and land application is not possible;

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6. Chamness shall turn the compost windrows at least twice a week;
7. Within 30 days from the date the Director signs this order, Chamness shall install pond level indicators in all three ponds;
8. Within 30 days from the date the Director signs this order, Chamness shall submit a written plan to DNR Field Office 6 detailing the facility's plan for reporting overflows and other reportable spills; and
9. Chamness shall pay a penalty of \$10,000.00. \$2,000.00 of the penalty shall be paid to the DNR within 30 days of the date the Director signs this order. In lieu of payment of the remaining \$8,000.00, Chamness shall:

Conduct a Supplemental Environmental Project (SEP). The SEP shall consist of research project between Chamness, Drake University, and the Wapello County Conservation Board investigating the effects of compost on prairie seed production. The study shall be conducted on a variety of native prairie species planted Wapello County Conservation Board's production plots. Drake University will be responsible for the set up and study of the project. The study is scheduled to begin in late spring 2010 and conclude at the end of the summer 2011. The study results will be provided to the Wapello County Conservation Board. A copy of the study results shall also be provided to the DNR at the conclusion of the study.

VI. PENALTY

1. Iowa Code sections 455B.191 and 455B.307 authorize the assessment of civil penalties of up to \$5,000.00 per day of violation for each of the violations involved in this matter.

2. Iowa Code section 455B.109 authorizes the Environmental Protection Commission (Commission) to establish by rule a schedule of civil penalties up to \$10,000.00, which may be assessed administratively. The Commission has adopted this schedule with procedures and criteria for assessment of penalties in 567 IAC chapter 10. Pursuant to these rules, the DNR has determined that the most effective and efficient means of addressing the above-cited violations is the issuance of an administrative consent order with an administrative penalty of 10,000.00. The administrative penalty is determined as follows:

Economic Benefit – 567 IAC chapter 10 requires that the DNR consider the costs saved or likely to be saved by noncompliance. 567 IAC 10.2(1) states that “where the violator received an economic benefit through the violation or by not taking timely compliance or corrective measures, the DNR shall take enforcement action which includes penalties which at least offset the economic benefit ” 567 IAC 10.2(1) further states, “reasonable estimates of economic benefit should be made

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where clear data are not available." Land application of wastewater is labor intensive, time consuming, and costs money. Hauling it to a treatment plant is even more expensive. Chamness saved considerable money by not maintaining adequate freeboard in its lagoons, allowing the lagoons to overflow, and not properly managing its wastewater. It is estimated that the Ottumwa wastewater treatment plant would charge \$0.10 per gallon for the wastewater from the Chamness facility. Based on the size of the ponds at the Chamness facility at the time of the discharges, it is estimated that Chamness would have had to haul approximately 100,000 gallons each time to prevent a discharge. If the Ottumwa facility had been willing to accept the wastewater, it would have cost Chamness approximately \$10,000.00 for each discharge event. In looking at other wastewater treatment facilities in the area, it is estimated that if the wastewater had been taken to the Iowa City wastewater treatment plant that the costs, including trucking costs, would have been approximately \$5,000.00 for each discharge event. It is estimated that Chamness was able to save between \$35,000.00 and \$70,000.00 by allowing the ponds to overflow rather than hauling the wastewater off site. Based on the above considerations, \$8,000.00 is assessed for this factor.

Gravity of the Violation – One of the factors to be considered in determining the gravity of a violation is the amount of penalty authorized by the Iowa Code for that type of violation. As indicated above, substantial civil penalties are authorized by statute. Despite the high penalties authorized, the DNR has decided to handle the violations administratively at this time, as the most equitable and efficient means of resolving the matter. The wastewater in the ponds contains high concentrations of BOD and ammonia-nitrogen and poses a threat of reaching a water of the state. Moreover, failure to properly maintain and manage wastewater threatens the integrity of the regulatory program. Additionally, Chamness violated provisions of the previous Administrative Consent Order. Based on the above considerations, \$1,500.00 is assessed for this factor.

Culpability – Chamness has a duty to remain knowledgeable of the DNR's requirements and to be alert to the probability that its conduct is subject to DNR's rules. Chamness was well aware of its wastewater situation. Chamness has had ongoing issues with the ponds as well as odor complaints. Based on the above considerations, \$500.00 is assessed for this factor.

VII. WAIVER OF APPEAL RIGHTS


This order is entered into knowingly and with the consent of Chamness. For that reason Chamness waives its rights to appeal this order or any part thereof.

VIII. NONCOMPLIANCE

Compliance with Section V of this order constitutes full satisfaction of all requirements pertaining to the violations described in this administrative consent order. Failure to comply with this order may result in the imposition of

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administrative penalties pursuant to an administrative order or referral to the Attorney General to obtain injunctive relief and civil penalties pursuant to Iowa Code sections 455B.191 and 455B. 307.



RICHARD A. LEOPOLD, DIRECTOR
Iowa Department of Natural Resources

Dated this 23 day of
June, 2010.



CHAMNESS TECHNOLOGY, INC.

Dated this 8 day of
June, 2010.

Kelli Book; Paul Brandt-FO6; Matt McDonald; EPA; VIII D.1.b